

I claim:

1 1. An armor comprising:
2 at least one projectile destroying layer having a woven
3 ballistic fabric with yarn cross overs and metal disks traversed
4 by the yarns at the cross overs; and
5 at least one layer containing ballistic fibers for
6 trapping projectile fragments behind said projectile destroying
7 layer.

1 2. The armor defined in claim 1 wherein said woven
2 ballistic fabric is composed of high tensile strength fibers such
3 as aramid, polyethylene or poly-p-phenylenebenzo-bis oxazole
4 yarns.

1 3. The armor defined in claim 2 wherein said yarns have
2 a denier between 19 and 1500 dtex.

1 4. The armor defined in claim 3 wherein said ballistic
2 fabric has a yarn density of 5 threads per inch to 100 threads
3 per inch.

1 5. The armor defined in claim 1 which comprises a
2 plurality of said projectile destroying layers and a plurality of
3 said layers for trapping projectile fragments in a ballistic
4 fabric shell forming a body armor.

1 6. The armor defined in claim 1 wherein said disks are
2 composed of titanium, titanium alloy, or other high tensile
3 strength ductile metal or alloy.

1 7. The armor defined in claim 6 wherein said disks are
2 circular.

1 8. The armor defined in claim 6 wherein said disks have
2 irregular or polygonal contours.

1 9. The armor defined in claim 1 wherein said ballistic
2 fiber is composed of a high tensile strength fiber such as
3 aramid, polyethylene or poly-p-phenylenebenzo-bis oxazole fiber.

1 10. A projectile destroying layer for use in an armor
2 and compressed of a woven ballistic fabric with yarn cross overs
3 and metal disks anchored at at least some of said cross overs and
4 consisting of a metal capable of tearing apart a projectile
5 entering said layer.

1 11. The projectile destroying layer defined in claim 10
2 wherein said disks are composed of titanium, titanium alloy, or
3 other high tensile strength ductile metal or alloy.

1 12. The projectile destroying layer defined in claim 11
2 wherein said fabric is composed of at least one yarn spun from a
3 high tensile strength fiber such as aramid, polyethylene or
4 poly-p-phenylene benzo-bis-oxazole fiber.

1 13. The projectile destroying layer defined in claim 12
2 wherein said disks are provided in a density of 10 to 500 per
3 square inch.

1 14. The projectile destroying layer defined in claim 13
2 wherein said fabric has a thread density for the warp and weft of
3 5 to 100 threads per inch.

1 15. The projectile destroying layer defined in claim 14
2 wherein said yarn has a diameter of 10 to 1500 dtex.

1 16. A projectile destroying structure for an armor
2 consisting of a plurality of layers as defined in claim 10.

1 17. The structure defined in claim 16 which comprises 2
2 to 155 layers.

1 18. In an armor, at least one projectile-damaging layer
2 comprised of fabric having beads with edges positioned to engage
3 flanks of an oncoming projectile and to shred the projectile
4 while said fabric captures fragments of the shredded projectile.

1 19. The layer defined in claim 9 wherein said beads are
2 disks.